

CLAIMS

1. A contacting part consisting of a male contacting portion and of a female contacting portion, the female contacting portion consisting of a body having a longitudinal axis of symmetry and an end of which is provided with a housing axially positioned in said body and compatible with the shape and the dimensions of said male contact, an external surface portion of the body distant from this end is in electrical contact with an annular crown extending towards the aperture of the housing through at least a contact clip achieving the electrical contact with the male contacting portion, the contact clip being provided with at least two resilient tabs joined to the annular crown, characterized in that the ends of the tabs are arranged so as to be interposed on the path for inserting the male contacting element into the housing, the inner diameter circumscribed by the ends of the resilient tabs is smaller than the inner diameter of the housing and than the external diameter of the male contacting portion.

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2. The contacting part according to claim 1, characterized in that the tabs have an L-shaped profile, the ends of which form an inner rim providing the electrical contact between the male contacting portion and the female contacting portion.

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3. The contacting part according to claim 1, characterized in that the resilient tabs have a length so that their free ends come into place in front of the entrance of the housing.

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4. The contacting part according to claim 1, characterized in that it includes a protective sleeve, essentially of tubular shape, surrounding the contact clip and including an aperture allowing the passage of the male contacting portion, the protective sleeve is force-fitted and set on at cylindrical span of the body of the female contacting portion.

5. The contacting part according to claim 4, characterized in that the protective sleeve is force-fitted and set on the annular crown.

5 6. The contacting part according to claim 4, characterized in that the dimensions of the aperture of the protective sleeve are such that they do not allow the introduction of a male contacting portion with a diameter larger than the diameter of the housing.

10 7. The contacting part according to claim 4, characterized in that the inner dimensions of the protective sleeve are such that they provide sufficient clearance for the contact clip so as to receive the male contacting portion.

15 8. The contacting part according to claim 4, characterized in that the protective sleeve allows the clearance of the contact clip to be limited to a maximum acceptable value.

20 9. The contacting part according to claim 4, characterized in that the aperture of the protective sleeve has a shape allowing it to facilitate the introduction and guidance of the male contacting portion.

25 10. The contacting part according to claim 1, characterized in that the ends of the tabs form an inlet cone, the dimensions of which determine a certain number of fundamental features of the contacting parts.

30 11. The contacting part according to claim 1, characterized in that the diameter of the housing is defined relatively to the diameter of the male contacting portion in order to provide a sliding assembly, the male contact being guided into the housing.

12. The contacting part according to claim 1, characterized in that

the annular crown is force-fitted and set onto the cylindrical portion of the body of the female contacting portion.

13. The contacting part according to claim 1, characterized in that
5 the resilient tabs have a length so that their free ends are behind the aperture of the housing, said ends of the resilient tabs providing the contact with the male contacting portion through windows provided in the body of the female contacting portion and opening onto the housing.

10 14. The contacting part according to claim 13, characterized in that an external protective sleeve improving the tightening of the annular crown and protecting the resilient tabs from mechanical aggression may be fixed onto the body of the female contacting portion.

15 15. The contacting part according to claim 2, characterized in that the L-shape of the resilient tabs limits the risk of pulling out the contact clip.

16. The contacting part according to claim 1, characterized in that
20 the contact clip and the body of the female contacting portion are made of different materials.

17. The contacting part according to claim 3, characterized in that
25 the contact clip is made of a high performance alloy combining resilient and conducting properties.

18. The contacting part according to claim 16, characterized in that
the body of the female contacting portion is made of a conventional
conducting alloy.

30 19. The contacting part according to claim 13, characterized in that the contact clip and the body of the female contacting portion are made of different materials.

20. The contacting part according to claim 13, characterized in that the contact clip is made of a high performance alloy combining resilient and conducting properties.

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21. The contacting part according to claim 13, characterized in that the body of the female contacting portion is made of a conventional conducting alloy.

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22. A connector, characterized in that it includes at least one contacting part according to claim 1.